

REMARKS

This responds to the Office Action dated September 25, 2006. Claims 1, 13, 20, and 30 are amended. Claims 8 and 17 are cancelled. No claims are added. As a result, claims 1-7, 9-16 and 18-30 are now pending in this patent application.

Allowable Subject Matter

Claims 8 and 17 were indicated to be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112 set forth in the Office Action. Accordingly, Applicant has cancelled claim 8 but incorporated the language of claim 8 into its base claim 1, thereby rendering claims 1-7 and 9-12 allowable. Similarly, Applicant has cancelled claim 17 but incorporated the language of claim 17 into its base claim 13, thereby rendering claims 13-16 and 18-19 allowable. Moreover, Applicant has incorporated similar language into independent claims 20 and 30, thereby rendering claims 20-30 to be allowable. Accordingly, Applicant respectfully submits that all claims are presently in allowable form. If the Examiner should disagree, the Examiner is invited to call Applicant's counsel, Suneel Arora, at 612-373-6951 so that any remaining minor issues can be expediently resolved.

§102 Rejection of the Claims

Claims 1, 13, 14, and 30 were rejected under 35 U.S.C. § 102(b) as being anticipated by Podrazhansky et al. (U.S. Patent No. 6,281,683). Applicant respectfully submits that the amendments to claims 1, 13, and 30 overcome this rejection, because they include subject matter that the Examiner indicated to be allowable. Accordingly, Applicant respectfully requests withdrawal of this rejection of these claims.

§103 Rejection of the Claims

First, claims 2, 3, 15, 16, 21 and 22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Podrazhansky et al. (U.S. Patent No. 6,281,683), as discussed above, in view of Takeuchi et al. (U.S. Patent No. 6,166,524). Second, claims 4-7, 9-12, 18-20 and 23-27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Podrazhansky et al. (U.S. Patent No. 6,281,683), as discussed above. Third, claims 28 and 29 were rejected under 35 U.S.C. §

103(a) as being unpatentable over Podrazhansky et al. (U.S. Patent No. 6,281,683), as discussed above, in view of Kaib (U.S. Patent No. 6,169,387). Applicant respectfully submits that the present claim amendments overcome these bases of rejection, because the claims now include subject matter that the Examiner indicated to be allowable. Accordingly, Applicant respectfully requests withdrawal of these bases of rejection of these claims.

Objection to the Drawings

The drawings were objected to under 37 C.F.R. 1.83(a) as not showing the earlier and later portions of the cell life. Applicant respectfully traverses on the grounds that this is impliedly shown by the flow chart of FIG. 8 in which 800 represents the beginning of the battery life, and process flow loops through 802 and 804 until the threshold condition of 804 is reached, at which point the battery enters the later portion of the cell life and process flow continues to 806. A similar example is given in FIG. 9.

Moreover, FIG. 7 already shows the beginning of the battery life ("FULL") and the end of the battery life ("EMPTY") and shows how two different stored capacity values can correspond to the same value of the non-monotonic polarization angle function, such that a measurement of quiescent voltage, as shown in FIG. 6, can be used to resolve any such measurement ambiguity in FIG. 7.

Accordingly, Applicant respectfully requests withdrawal of this objection to the drawings or, alternatively, the Examiner is respectfully requested to call Applicant's counsel, Suneel Arora, at 612-373-6951 to expediently resolve this minor issue.

Objection to the Claims

Claims 8 and 13 were objected to due to various informalities. Applicant has amended the claims to overcome this objection. Claim 8 has been cancelled, thereby mooted the objection to claim 8, however, the Examiner's suggestion has been incorporated into claim 1, into which the language of dependent claim 8 has been incorporated. Applicant has amended claim 13 to incorporate the Examiner's suggestion. Accordingly, Applicant respectfully requests withdrawal of the objection to claim 13.

§112 Rejection of the Claims

Claims 1-30 were rejected under 35 U.S.C. § 112, second paragraph, for indefiniteness.

First, concerning claims 1, 13, and 30, the Office Action asserts that “drawing . . . a first . . . pulse; measuring a first change of a terminal voltage” is not clear as 2 (two) measurements would be necessary in order to establish a change.” Applicant respectfully traverses on the grounds that “a first change” does not preclude using two measurements, and because such measurements can both be made during the same first pulse, the present claim language is believed to meet the definiteness requirement of 35 U.S.C. § 112. Accordingly, Applicant respectfully requests withdrawal of this rejection of these claims.

Second, concerning claim 20, the Office Action asserts that “a processor circuit, coupled to or including the difference circuit is not clear.” Applicant respectfully traverses on the grounds this claim language merely allows for the difference circuit to be part of the processor, or implemented as a separate component that is coupled to the processor. Since one of ordinary skill in the art would reasonably be apprised of the claim scope, Applicant believes that the present claim language meets the definiteness requirement of 35 U.S.C. § 112. Accordingly, Applicant respectfully requests withdrawal of this rejection of this claim.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6951 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 21 day of December, 2006.

Name

Signature